



US Army Corps
of Engineers

UPDATE FOR
Orange County

April 8, 2008

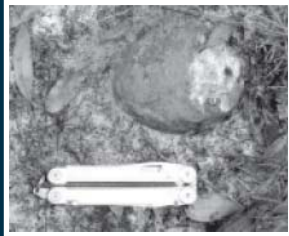


FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO, FLORIDA

Site Chronology

1943-1948: Approx. 12,488 acres leased by Department of Defense

| 1997 | 2004 | 2005 | JUL 2007 | AUG 2007 | SEPT 2007 |
|------------------------------|--|---|---|--|---|
| Archives Search Report (ASR) | ASR Supplement Updated Risk Assessment | Site Inspection (SI) Initiated | Draft Final SI Report Complete | SI Complete | Public Meeting |
| | | | SI Public Workshop | TCRA Initiated at School & Mockingbird | Mockingbird Investigation & Removals Begin |
| | | | Time Critical Removal Action (TCRA) Recommended | Public and Homebuilders Meetings | Restoration Advisory Board (RAB) Interest Meeting |
| | | Patrick Air Force Base removes munitions at landowner's request |  | Soil Testing, Surface Clearing & Temporary Fence Erected | |

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Site Chronology (continued)

| Nov 2007 Lennar Finds (Nov 6 th & 28 th) Warwick & Tivoli Gardens Meetings TCRA Initiated in Tivoli Gardens School & Mockingbird Investigation & Removals | Dec 2007 TCRA Initiated in Warwick School and Mockingbird Investigation & Removals | Jan 2008 Tivoli Gardens and Warwick Investigation & Removals School and Mockingbird Investigation & Removals Warwick Meeting | Feb 2008 Remedial Investigation Feasibility Study (RI/FS) Contract Awarded First RAB Meeting Tivoli Gardens and Warwick Investigation & Removals Mockingbird Investigation & Removals | March 2008 Tivoli Gardens and Warwick Investigation & Removals Mockingbird Investigation & Removals RI/FS TPP Meeting with Stakeholders |
|---|--|--|--|---|

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Site Chronology (Future Activities)

- Warwick and Mockingbird Investigation and Removals Complete (April 2008)
- RI/FS Draft Work Plan (April 2008)
- Tivoli Gardens Investigation and Removals Complete (May 2008)
- Restoration Advisory Board Meeting (May 2008)
- Geophysical Investigation (Mapping) Begins (June 2008)
- FI/FS Complete (FY2009)
- Proposed Plan & Decision Document Approval (FY2010)
- Initiate Remedial Design (FY2010)
- Initiate Remedial Action (FY2011-2014)
- Long-Term Monitoring (FY2015-2036)
- Project Closeout (FY2036)

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Site Orientation

Department of
Defense Uses

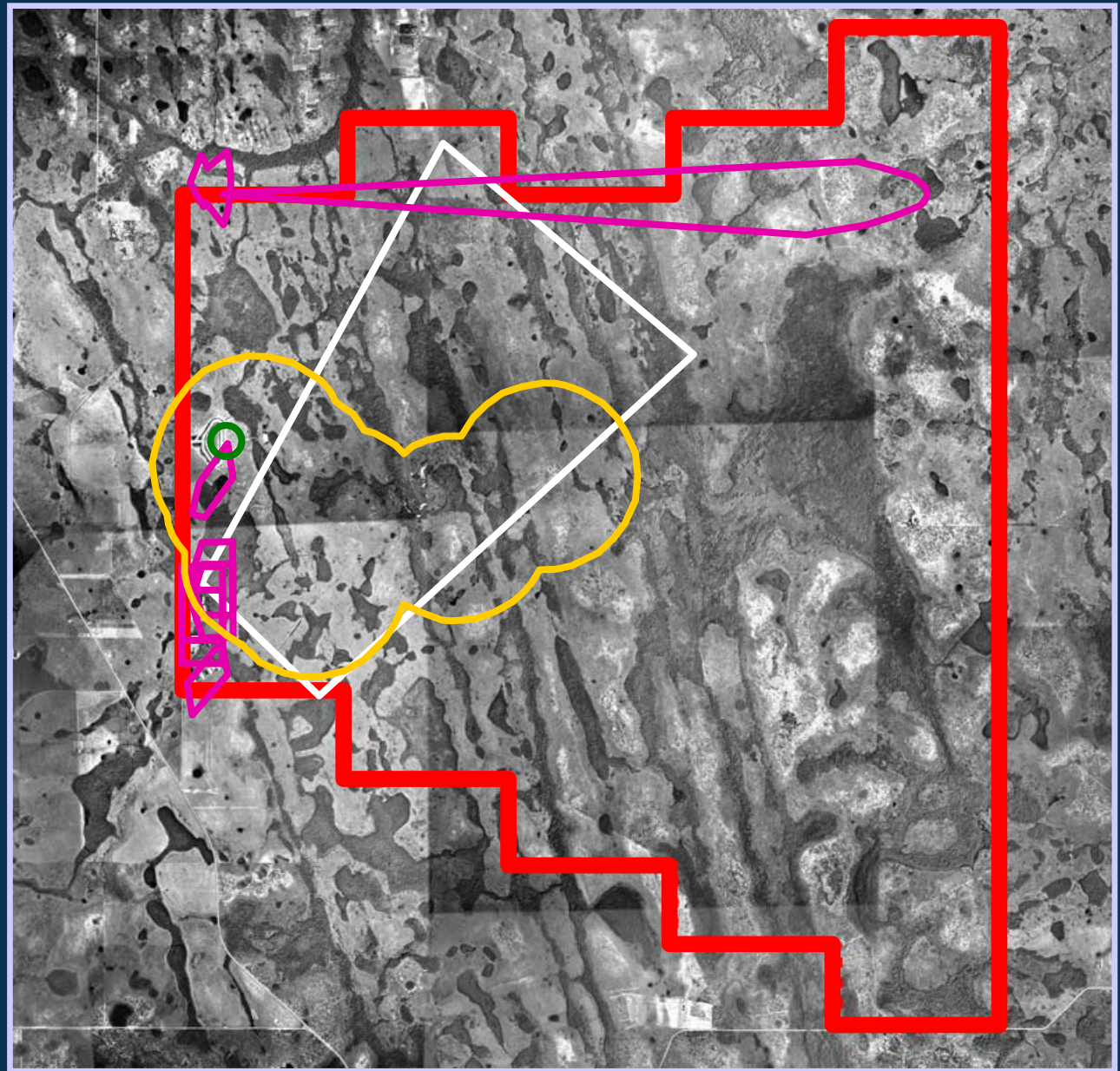
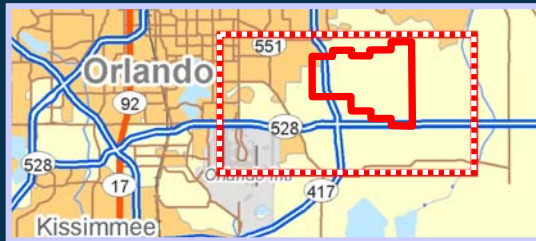
Ranges:

Chemical (incendiary,
smoke) Demonstration

Rocket Range

Small Arms Range

Bomb Target



March 1952

PINECASTLE JEEP RANGE

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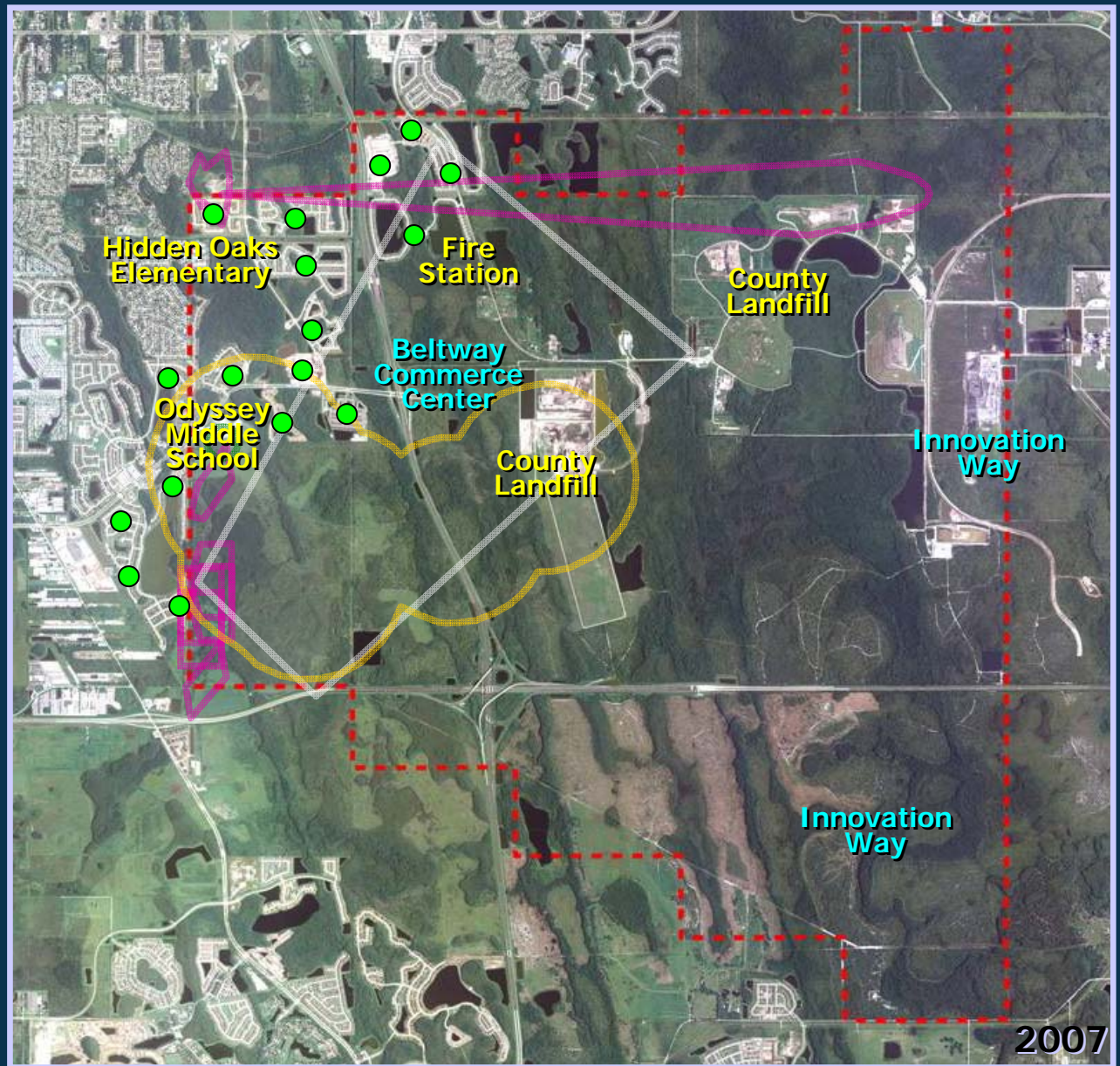
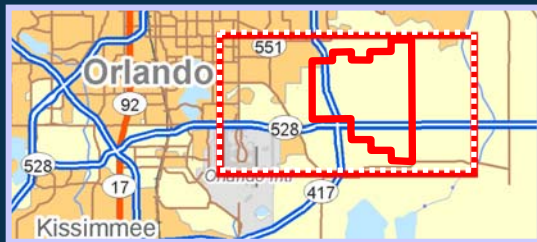
Current Site Conditions

Land Use

● 15+ Subdivisions and Related Homeowners Associations

■ Public Uses

■ Planned Large-Scale Development (Mixed-Use)



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PINECASTLE JEEP RANGE



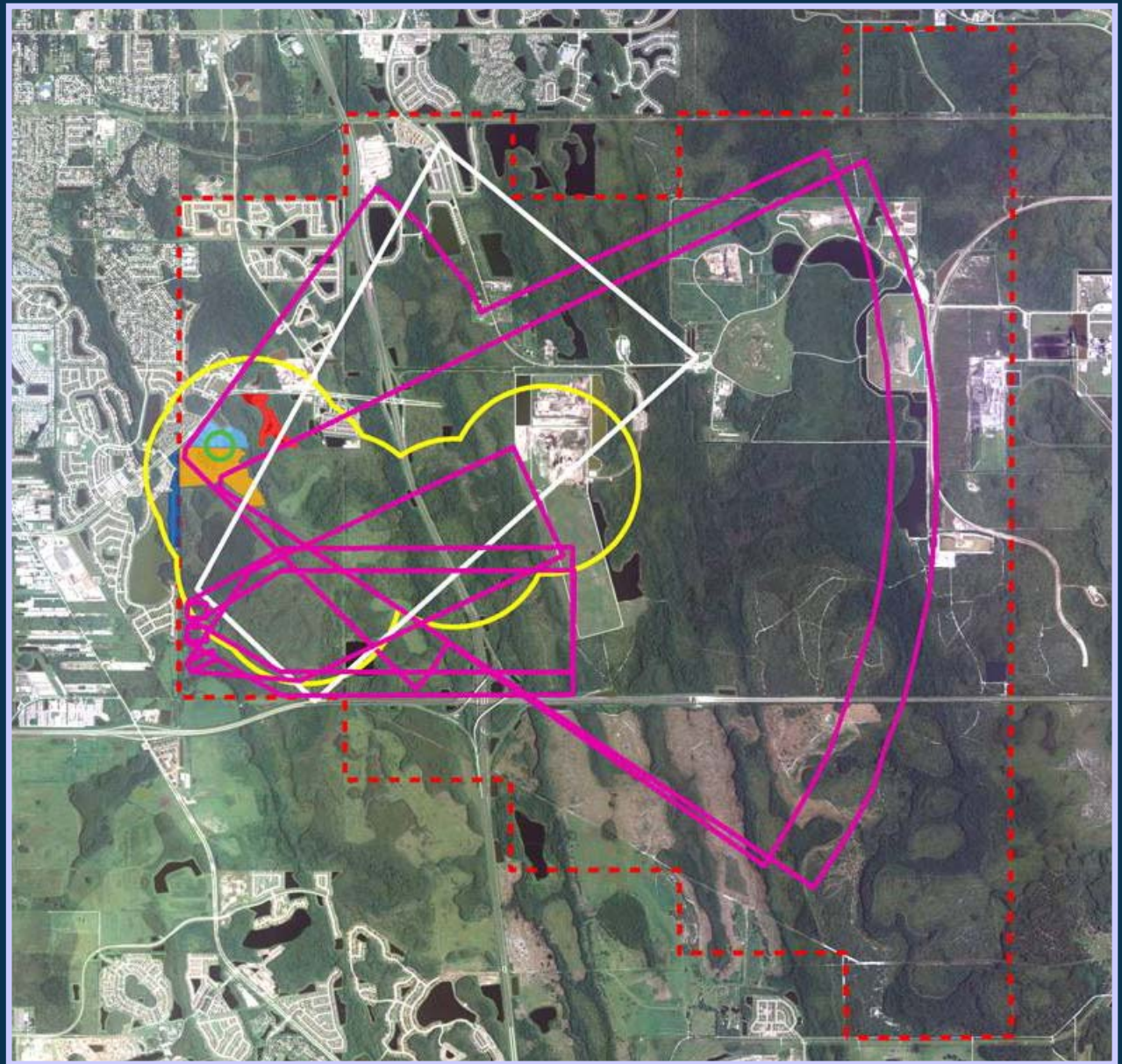
Mockingbird LLC Property
4.2 inch white phosphorus mortar and munitions demolition
January 2008

AREAS INVESTIGATED

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Time Critical Removal Actions

-  Odyssey Middle School
-  Mockingbird LLC Property
-  Tivoli Gardens Subdivision
-  Warwick Subdivision



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Time Critical Removal Actions

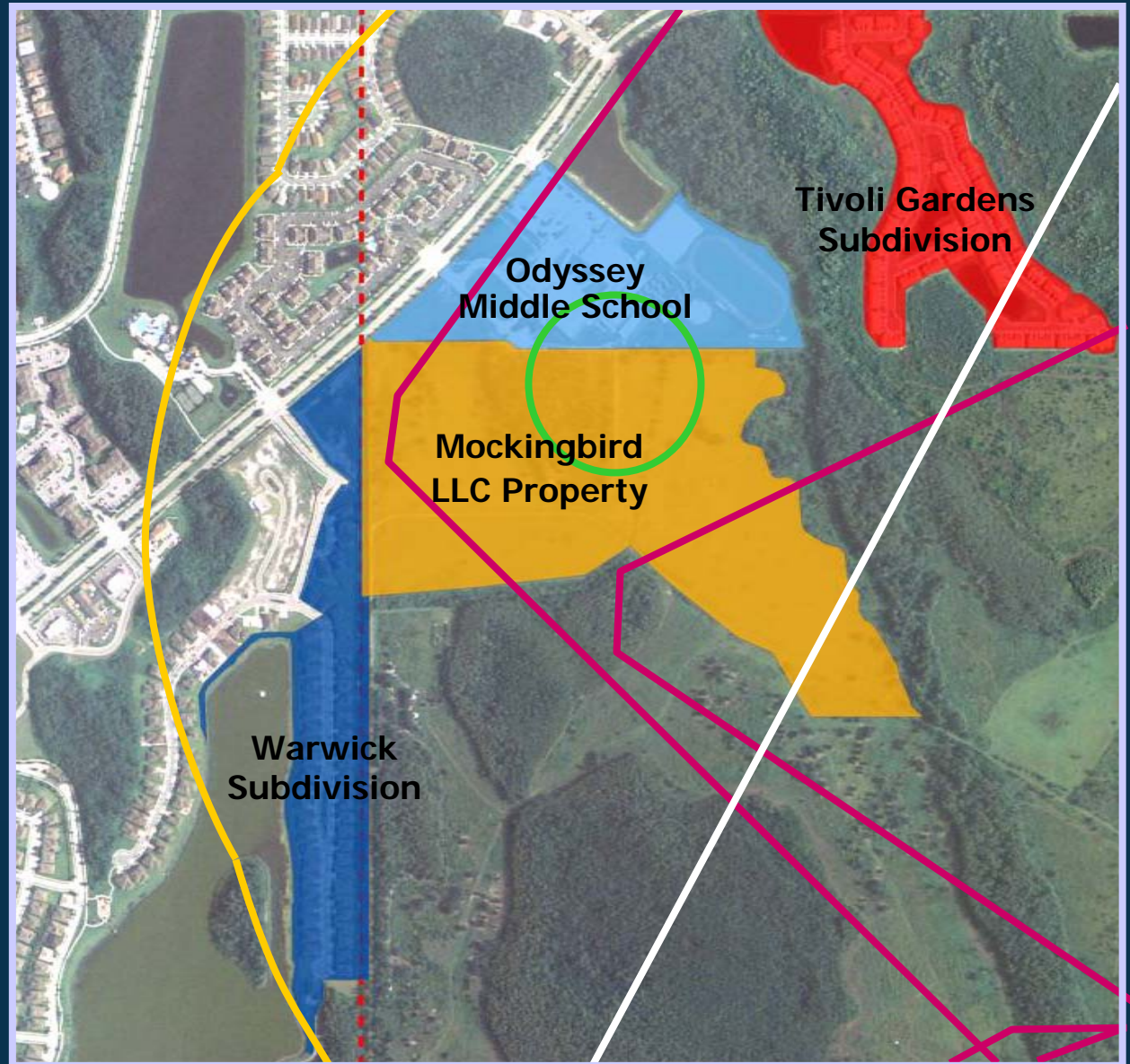
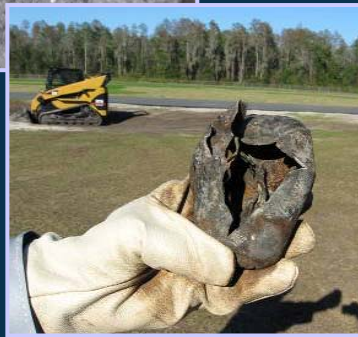
Ranges:

Chemical (incendiary ,
smoke) Demonstration

Rocket Range

Small Arms Range

Bomb Target



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TCRA – Examples of Munitions Uncovered at Odyssey Middle School



Munitions Debris
(fragments or inert bombs)

Live Munitions



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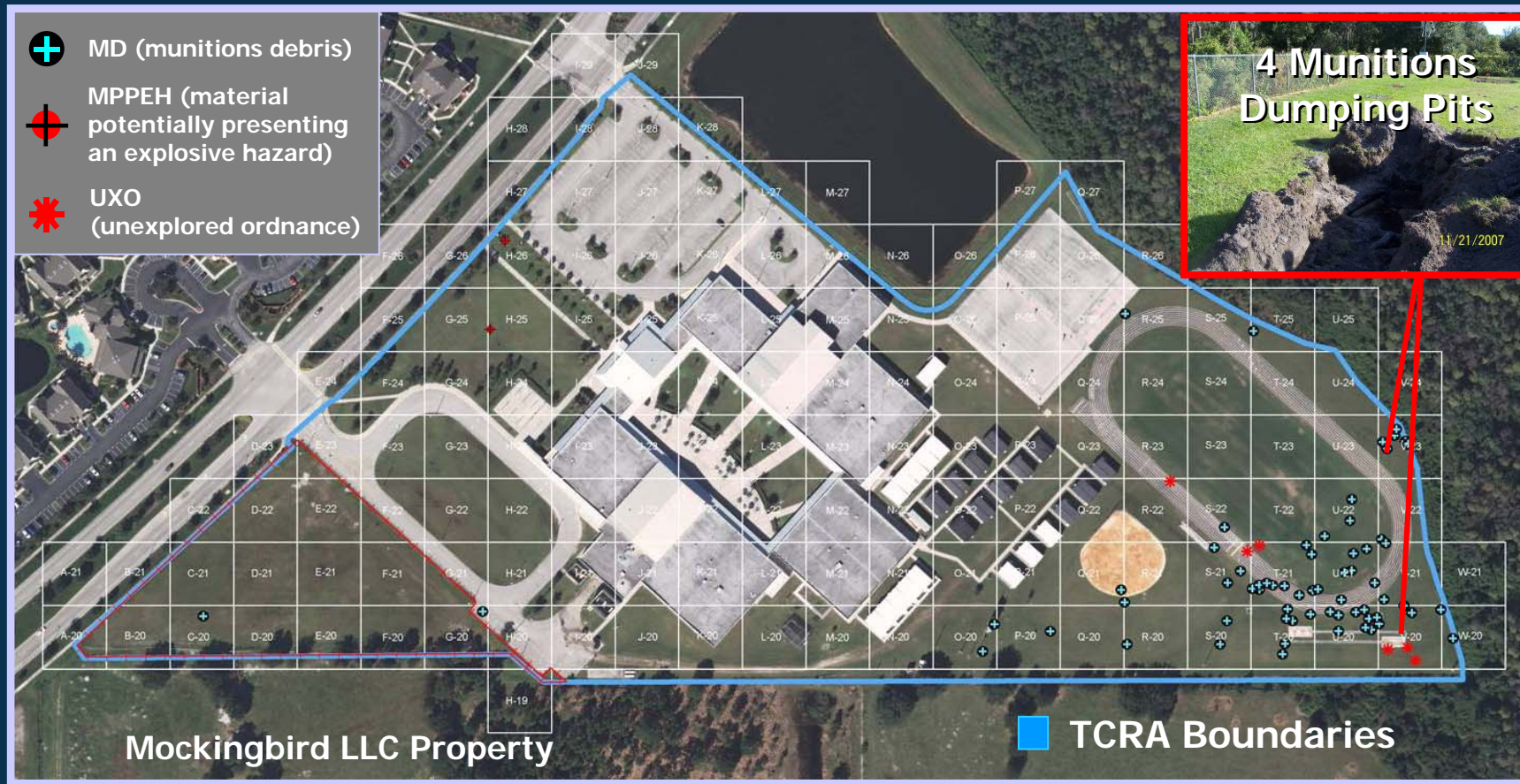
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TCRA Status

Odyssey Middle School

Start: 08/03/07

- 3 removal periods to accommodate school operations
- No surface munitions or surface munitions debris
- 2,515 targets investigated
- 126 munitions with high explosives destroyed
- 115 munitions debris items
- 14 tons of cultural debris removed
- Chemical analysis of soil samples completed – soils meet standards
- Track area restored



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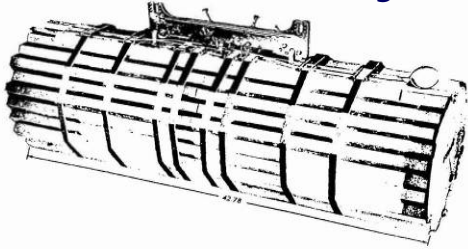
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TCRA Summary – Investigation Concerns

Odyssey Middle School

Current Target Threshold:

4 lb Incendiary



18 inches

At Current Target Threshold:

**37 mm
Projectile**



Detection at
4 inches

Proposed Target Threshold:

**37 mm
Projectile**



Detection at
12 inches
or deeper

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Path Forward

Odyssey Middle School

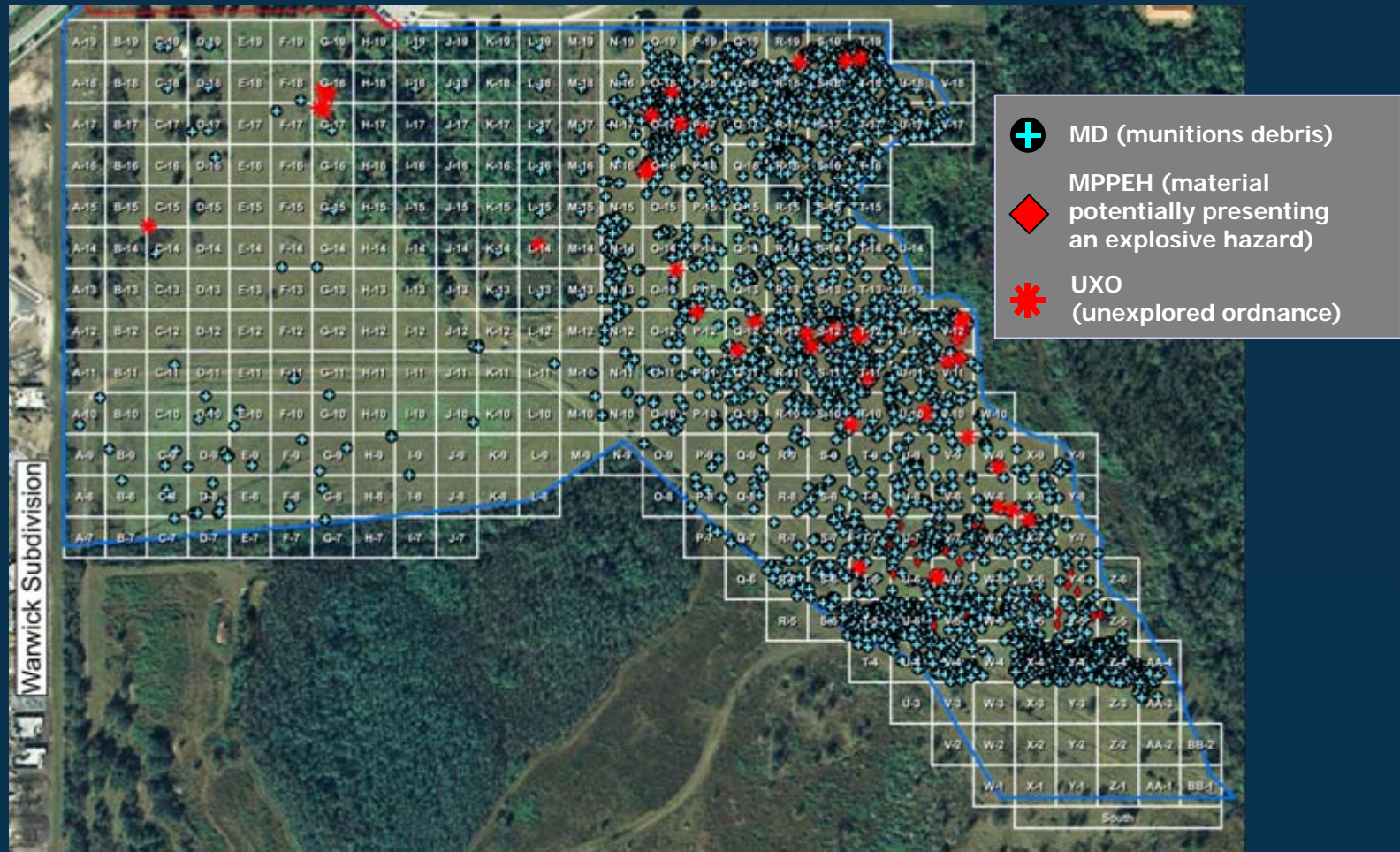
- School property is safe in the absence of digging or other ground surface penetrating activities
- Odyssey Middle School grass and dirt areas will be investigated for 37 mm projectiles to a depth of 12 inches, at a minimum (detection-level)
- Recommend school place digging restrictions on property requiring munitions construction support (examples: digging in grass, dirt or under structures; removing pavement)
- Media informed of further investigation through coordinated effort

TCRA Status

Mockingbird LLC Property

Start: 09/02/07

- 61 acres to be investigated
- 7,652 targets to be investigated
- 85 munitions with high explosives destroyed
- 4 tons of cultural debris removed
- 1540 munitions debris items



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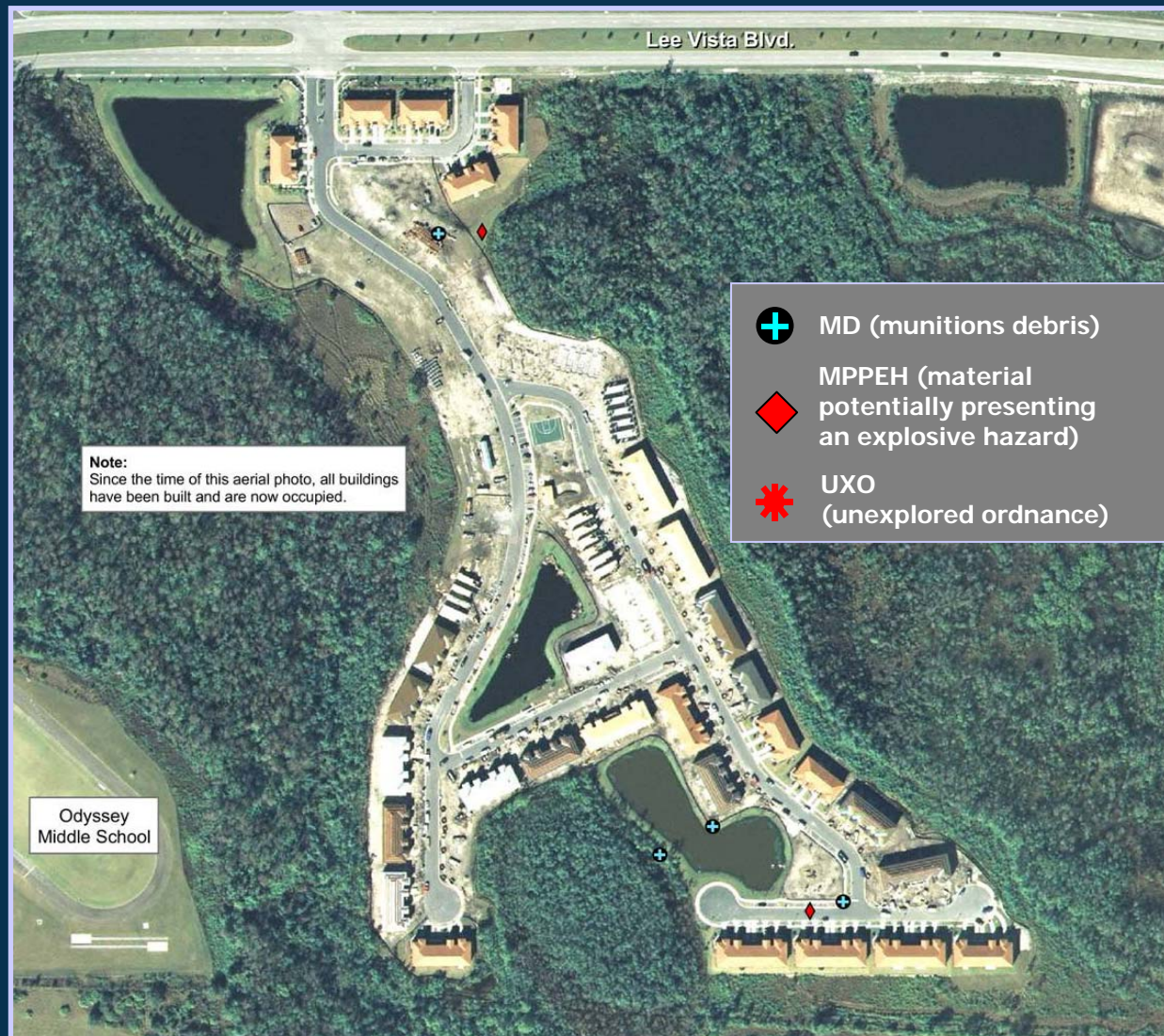
PINECASTLE JEEP RANGE

TCRA Status

Tivoli Gardens Subdivision

Start: 01/07/08

- Geophysical surveys for sub-surface ordnance (230 residences)
- 1,173 targets to be investigated
- 3 munitions with possible high explosives including an 23 lb frag bomb
- 10 munitions debris items found; and 36 mm, 75 mm, and 90 mm mortars
- .5 tons of cultural debris removed



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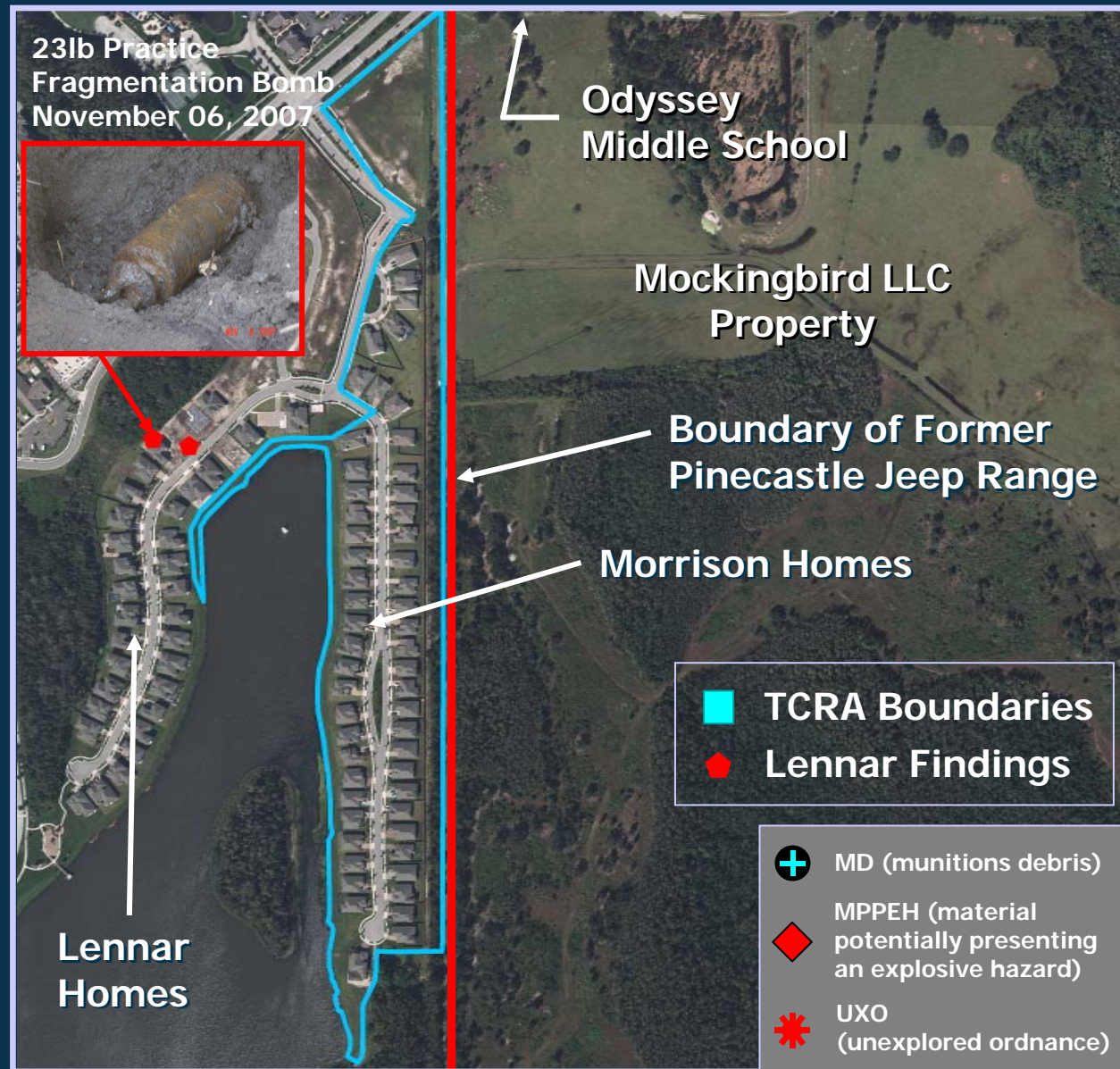
PINECASTLE JEEP RANGE

TCRA Status

Warwick Subdivision

Start: Feb 2008

- Geophysical surveys for sub-surface ordnance in Morrison Homes portion just started (55 residences)
- 0 munitions with high explosives
- 0 munitions debris items
- .6 tons of cultural debris removed



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

CERCLA Process

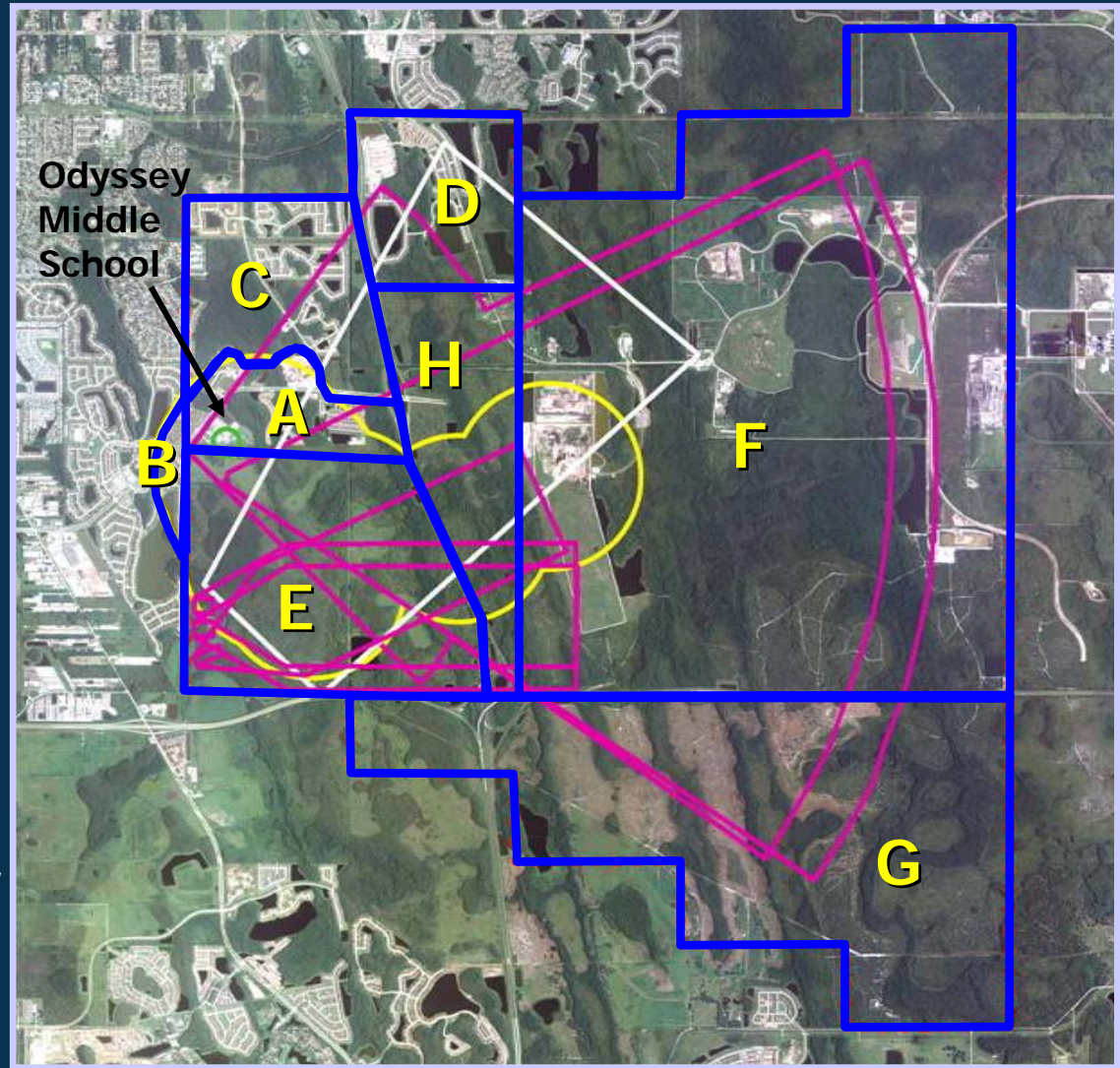
- FUDS Program has to follow the CERCLA Process
- TCRA for munitions removal actions only in response to hazards that pose immediate risk to people
- Site Inspection (SI)
 - Sample, research, analyze, & determine need for RI/FS
- Remedial Investigation/Feasibility Study (RI/FS)
 - Identify type of contamination
 - Identify extent of contamination
 - Identify remediation alternatives
- Proposed Plan
 - Identify recommended remediation
- Decision Document
- Remediation

Areas of Interest A – D and part of F are first priority

RI/FS

Planning Basis

- RI/FS contract awarded February 28, 2008
- RI/FS Areas of Interest prioritized during government meeting in January 2008
- TPP meeting with stakeholders in March 2008
- RI/FS work plan review in April 2008
- RI/FS contractor starts investigation in housing areas in Spring 2008
- Decision Document will identify remedial actions for Areas of Interest



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area A (City)

- Complete geophysical mapping and digging of suspected munitions in housing areas
- 125' transects in southern end of wetland between the school and Tivoli Gardens investigate path between school and Tivoli
- 125' transects in wetland in arch of Tivoli Garden boot
- 250' transects in undeveloped uplands and wetlands within bomb circle
- Transects on either side of Lee Vista Boulevard
- Soil Sampling where munitions found and where munitions debris is found in residential area



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area B (City)

- Complete geophysical mapping and digging of suspected munitions in housing areas
- Transect conservation area near Warwick and Vista Lakes Community Center
- Soil Sampling where munitions found and where munitions debris is found in residential areas



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area C (City)

- Complete geophysical mapping and digging 20% of suspected munitions in housing areas
- Complete geophysical mapping of school and digging 20% of suspected munitions
- 250' transects in undeveloped upland
- Transect trails in wetlands
- Soil Sampling where munitions found where munitions debris is found in residential areas



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area D (County)

- Complete geophysical mapping and digging 20% of suspected munitions in housing areas
- 250' transects in undeveloped uplands
- Leave wetlands undisturbed
- Soil Sampling where munitions are found and where munitions debris is found in housing areas



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PINECASTLE JEEP RANGE

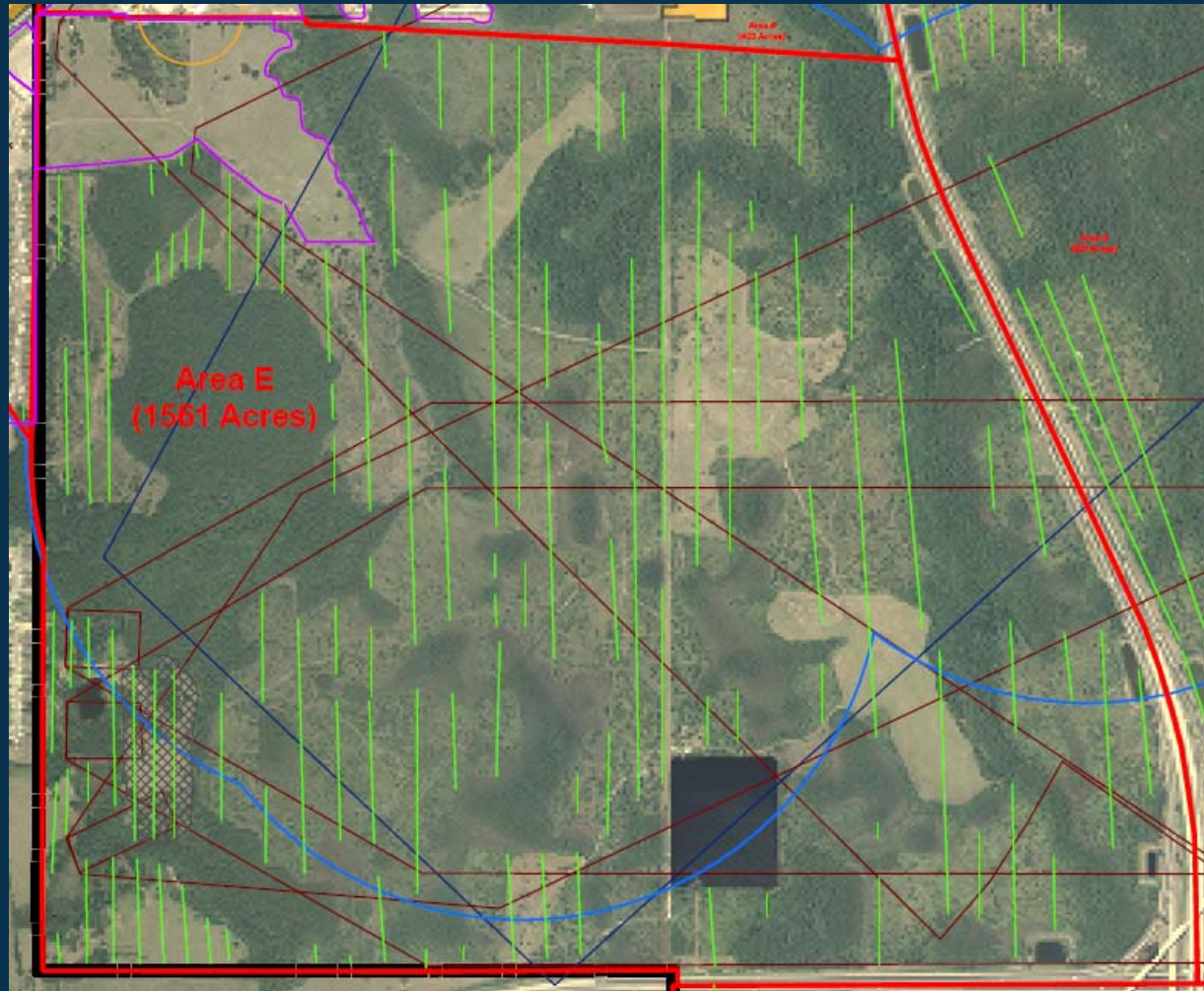
RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area E (City)

- 125' transects in uplands
- Characterize wetlands
- Soil Sampling where munitions are found



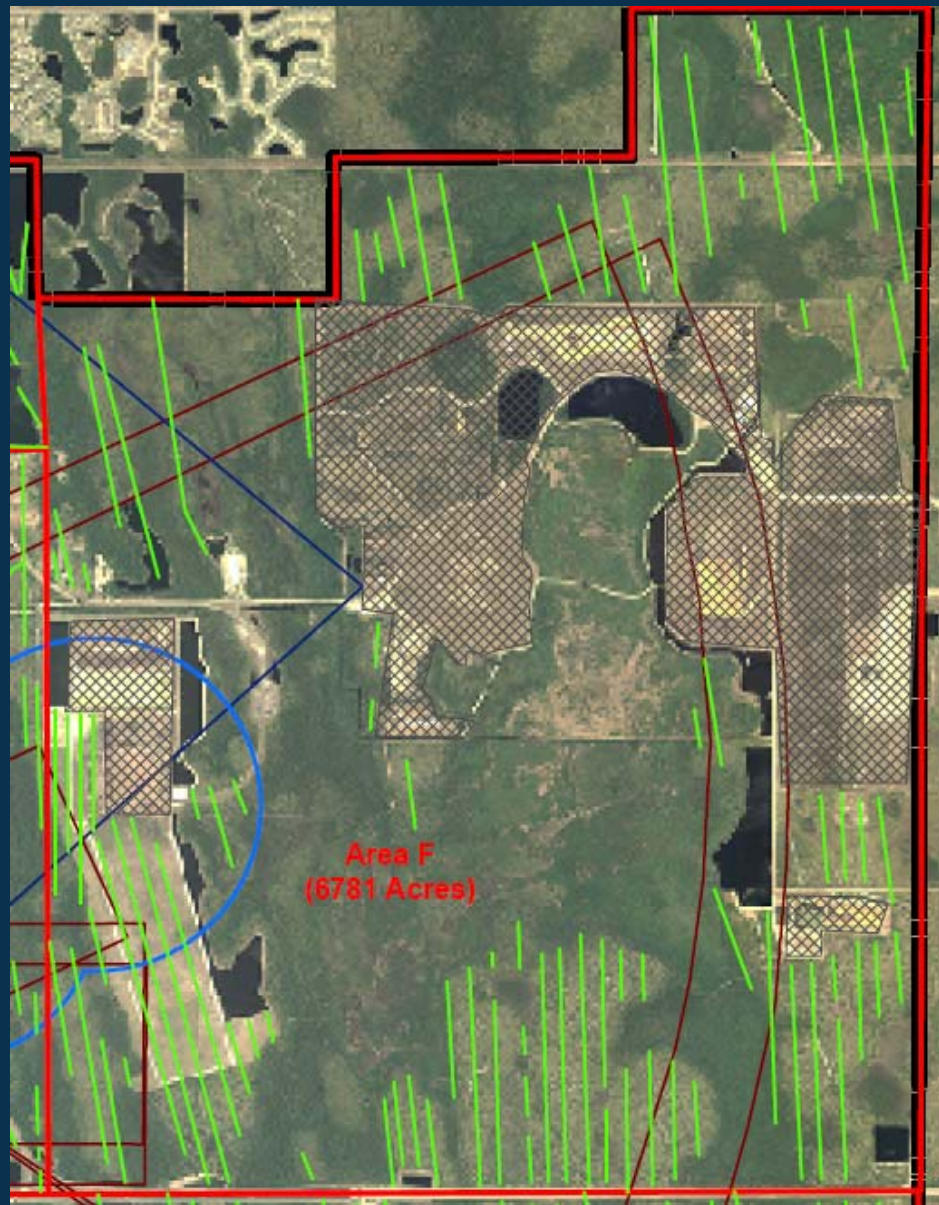
RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area F (County)

- 250' transects including in areas anticipated for borrow or future landfill expansions
- Characterize around wetlands
- Soil Sampling where munitions are found



RI/FS Objectives & Methodology



Objective

No fear of access;
site sufficiently
remediated to
support safe use

Methodology Area G

(County; northwest corner – City)

- 250' transects in uplands
- Characterize around wetlands
- Soil Sampling where munitions are found

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area H

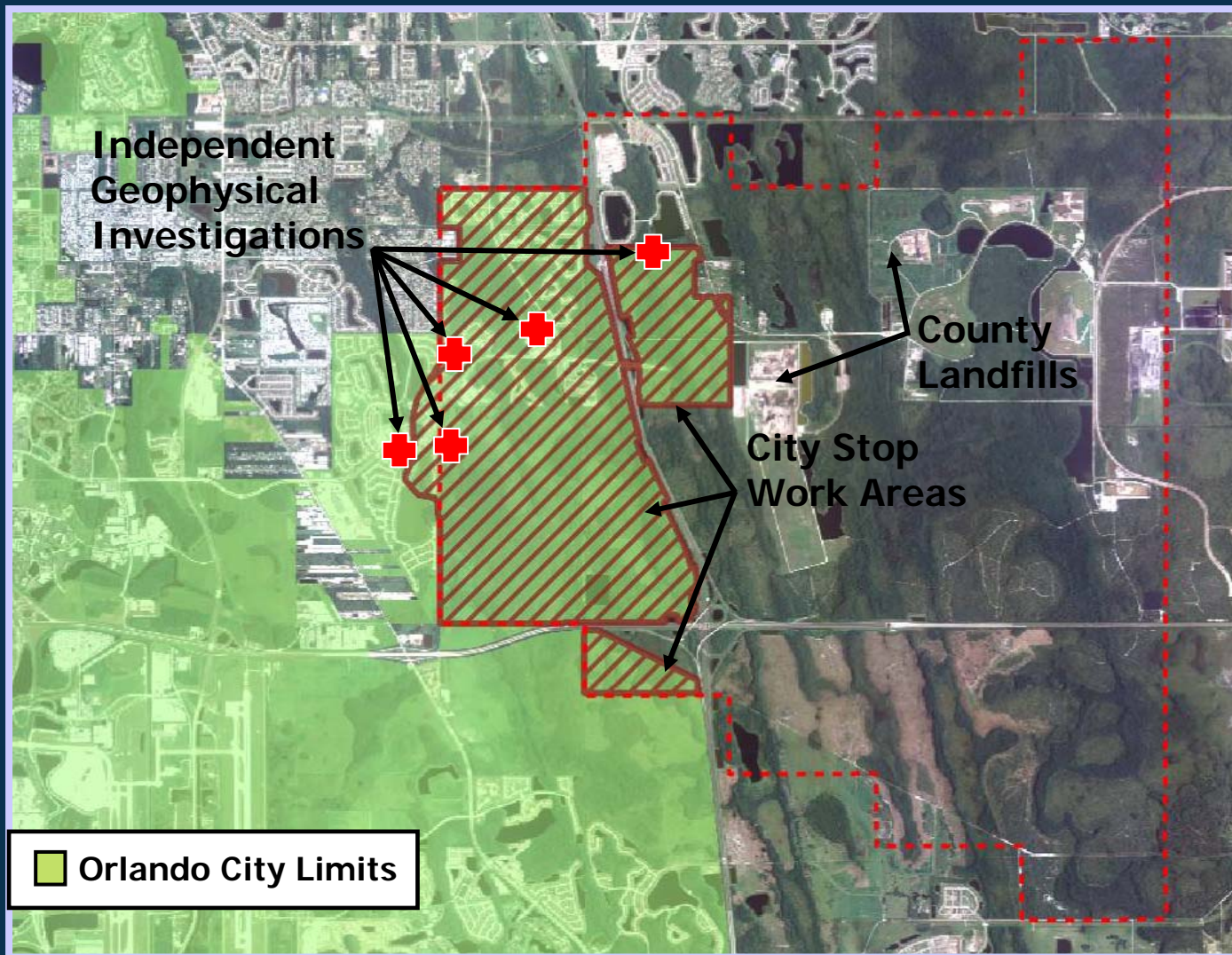
(northern portion – City; southern portion – County)

- 250' transects in uplands
- Transects on either side of Young Pine Road
- Transects in lots in northeast corner
- Characterize around wetlands and conservation areas
- Soil Sampling where munitions are found



Actions by Others

- City of Orlando stop work order
- Independent investigations
- County landfill development
- County is proposing action



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE



**Odyssey
Middle School**
DASA Site Visit
August 2007

PUBLIC INVOLVEMENT & COMMUNICATION PLAN

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Public Involvement and Communication Plan

Actively Engage the Community

Restoration Advisory Board

- Established in cooperation with state and local government
- Proactively recruited to ensure diverse representation
- First organizational workshop held February 2008
- Training to be provided for RAB members
- Anticipate involvement in RI/FS planning

Relationship Building

- Ongoing coordination with state and local government representatives throughout project life cycle
- Productive relationships established with homeowners associations
- Personal, one-on-one interactions with community members
- Regular on-site presence during operations

Coordination with Congressional Representatives

- Continue to provide periodic updates



Public Involvement and Communication Plan

Inform Community through Multi-media Sources

Interactive Communication

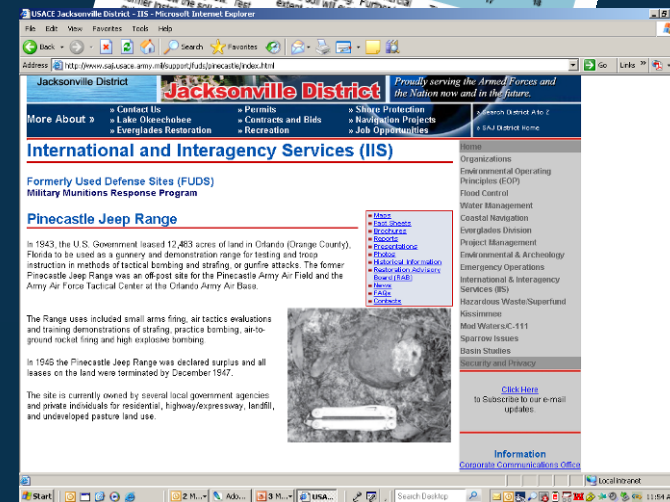
- E-mail subscription service and toll-free number established for direct communication
- Public meetings and public comment periods at appropriate points in CERCLA process
- Informal workshops and community meetings

Information Access

- Information repositories at local libraries
- Project website with videos, photos, fact sheets, historical documents, presentations, contact information and more
- UXO safety materials to school and homeowners

Media relations

- Ongoing news releases, media availability sessions, interviews, news conference and editorial boards
- Appearances on local TV news shows
- Proactive sharing of project-related stories and information
- One-on-one meetings with local assignment editors



PINECASTLE JEEP RANGE

Restoration Advisory Board (RAB)

- Initial RAB meeting held February 26, 2008
- Approximately 60 people in attendance
- Community co-chair elected: Jim Shelton (homeowner)
- RAB membership includes 21 members of the community and representatives of the state, county and city
- RI/FS Public Meeting (March 27, 2008)
 - held as a joint TPP/RAB meeting
 - public is provided an opportunity to provide feedback on the RI/FS work plan
 - will have high media interest

DISCUSSION



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO, FLORIDA